03050204-050 (South Fork Edisto River)

General Description

Watershed 03050204-050 is located in Barnwell, Orangeburg, and Bamberg Counties and consists primarily of the *South Fork Edisto River* and its tributaries from Dean Swamp Creek to its confluence with the North Fork Edisto River. The watershed occupies 163,795 acres of the Upper and Lower Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Varina-Dothan-Johnston-Meggett series. The erodibility of the soil (K) averages 0.17; the slope of the terrain averages 3%, with a range of 0-6%. Land use/land cover in the watershed includes: 0.92% urban land, 36.33% agricultural land, 11.73% scrub/shrub land, 0.55% barren land, 26.82% forested land, 23.28% forested wetland (swamp), 0.05% nonforested wetland (marsh), and 0.32% water.

As a reach of the South Fork Edisto River, this watershed accepts the drainage from all streams entering the river upstream. Spur Branch enters the river at the top of the watershed, followed by Whaley Creek (Matthews Millpond), Dry Branch, and the Goodland Creek watershed (03050204-060). Further downstream, Windy Hill Creek (Sheepford Branch) enters the river near the Town of Blackville, followed by Rocky Swamp Creek (Campbell Branch, Pleasant Branch), Rogers Branch, Snake Branch, and Little River (Willow Swamp) near the Town of Norway. Sykes Swamp enters the river next, followed by Hays Mill Creek (Stout Creek), Scratchnose Swamp (Reed Branch), Sucksand Branch, and the Roberts Swamp watershed (03050204-070). Snake Swamp (Sam Branch) and Isaac Jennings Canal flow past the Town of Cope at the base of the watershed to enter the river. There are a total of 286.6 stream miles in this watershed, all classified FW.

Water Quality

Station #	Type	Class	Description
E-029	BIO	FW	WINDY HILL CREEK AT SR 38
E-012	S	FW	SOUTH FORK EDISTO RIVER AT S-38-39 BRIDGE

South Fork Edisto River (E-012) - This stream was Class B until April, 1992. Aquatic life uses are fully supported based on macroinvertebrate community data, but there is a significant decreasing trend in dissolved oxygen, a significant increasing trend in turbidity, and a high concentration of zinc measured in 1997. Recreational uses are fully supported, but there is a significant increasing trend in fecal coliform bacteria concentration.

Windy Hill Creek (E-029) - This stream was Class B until April, 1992. Aquatic life uses are partially supported based on macroinvertebrate community data.

A fish consumption advisory has been issued by the Department for mercury and includes the streams within this watershed (see advisory p.31).

Permitted Activities

Point Source Contributions

RECEIVING STREAM
FACILITY NAME
PERMITTED FLOW @ PIPE (MGD)

COMMENT

SOUTH FORK EDISTO RIVER

TOWN OF BAMBERG PIPE #: 001 FLOW: 2.5/2.0 (PROPOSED)

WQL FOR TRC

SOUTH FORK EDISTO RIVER

TOWN OF SPRINGFIELD/PLANT #1

PIPE #: 001 FLOW: 0.120

SOUTH FORK EDISTO RIVER SCE&G/COPE POWER PLANT

PIPE #: 001 FLOW: 4.36

WQL FOR TRC

WINDY HILL CREEK

TOWN OF BLACKVILLE PIPE #: 001 FLOW: 0.33

PIPE #: 001 FLOW: 0.80 (PROPOSED) WQL FOR NH3-N, DO, TRC, BOD5

WILLOW SWAMP

TOWN OF NORWAY PIPE #: 001 FLOW: 0.165

WETLAND; WQL FOR NH3-N, DO, TRC, BOD5

NPDES# TYPE

LIMITATION

SC0047163

MAJOR MUNICIPAL

WATER QUALITY

SC0023272

MINOR MUNICIPAL

EFFLUENT

SC0045772

MINOR INDUSTRIAL WATER QUALITY

SC0026417

MINOR MUNICIPAL WATER QUALITY WATER QUALITY

SC0045993

MINOR MUNICIPAL WATER QUALITY

Landfill Activities

SOLID WASTE LANDFILL NAME FACILITY TYPE

SCE&G COPE STATION INDUSTRIAL

PERMIT # STATUS

383320-1601 ACTIVE

Growth Potential

There is a low potential for growth in this watershed. Slight increases in commercial growth would be possible with the proposed widening of U.S. Highway 78, which runs from the Town of Denmark to the Town of Bamberg. Industrial growth is possible due to the rail lines already in place. One rail line runs from the Town of Blackville to the Town of Springfield, and another from Denmark to the Town of Norway and on upstate to the City of Columbia. U.S. Highway 321 parallels the rail line that bisects the watershed. The Town of Denmark shows declining population trends, but the Town of Bamberg shows slightly increasing population growth. The SCE&G Cope Power Plant could boost residential and commercial growth in the area, primarily for the Town of Bamberg.